

Application No. 10/814,629
Amendment dated December 6, 2005
Reply to Office Action of September 6, 2005

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REMARKS

In view of the above amendment, applicant believes the pending application is in condition for allowance.

The Office Action and prior art relied upon have been carefully considered. In an effort to expedite the prosecution the original claims have been canceled and redrafted as claims 9-15.

Claims 1-7 were rejected under 35 U.S.C. §112, second paragraph as being indefinite. The necessary corrections have been made so that further rejection on this ground is not anticipated.

Claims 1 and 6 were rejected under 35 U.S.C. § 102(b) as anticipated by Bensenschek (US 5,730,357). Claims 1, 4 and 6 were rejected under 35 U.S.C. §102(b) as anticipated by Young (US 5,203,502). Claim 5 was rejected under 35 U.S.C. §103(a) as unpatentable over Young in view of Harkus (US 4,971,247). Finally, claims 2 and 3 were rejected under 35 U.S.C. §103(a) as unpatentable over Bensenschek in view of Pilsesi (US 6,786,459).

The claims as amended clarify the novel aspects of the invention. Prior to a discussion of the prior art, it should be helpful to the Examiner to point out that the present invention addresses the problem of pad creep (see page 2 lines 3-10). When installed rail pads are subjected to the forces generated by the weight of the moving train acting through the wheels onto the rail. Generally traffic on a particular set of rails is in one direction. Movement of the rail in its longitudinal direction generally causes rail pad slippage. Further as a train travels over the rails a wave precedes it and this vibration wave along the rail in the direction of travel squeezes the pad in the direction of travel. After the train has passed the weight of the rail is still great enough to prevent the pad from recovering its original position. Because the traffic on the rails is generally in one direction only, the effects of the train passage on the pad accumulates and causes pad creep. Pad creep causes longitudinal (along the axis of the rail) movement of the rail pad and this invention provides a rail pad and rail seat that ameliorates this problem.

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The claims have been amended to bring out the key feature of this invention namely:

1. The rail pad 13 has projections 27 extending along the sides of the shoulder 16 that are vertically thicker than the rest of the pad. This reduces the risk of pad creep by providing resistance to longitudinal rail pad movement.

2. The insulator 19 is preferably a deep post insulator in which the portion lying between the rail and the shoulder extends below the rail base between the rail pad 13 and the shoulder 16 as seen in figure 1.

3. The support shoulder 16 includes projections 31 on the sides to locate the rail pad 13 correctly so as to leave a recess for the insulator as shown in fig 6; or

4. The rail pad 13 includes a web 30 to space the rail pad from the shoulder 16 so as to leave a recess for the insulator as shown in figure 6.

Bensenschek discloses a rail seat having a support shoulder, rail pad and insulator but:

1. The support shoulder 20 does not include projections on the sides to locate the rail pad correctly to leave a recess for the insulator.

2. The rail pad 30 does not have projections extending along the sides of the shoulder that are vertically thicker than the rest of the pad.

3. The insulator 24 is not a deep post insulator as the pad recess 32 which supports the lower edge of the insulator is more than half of the pad thickness (col 3 lines 15-20).

Bensenschek is primarily concerned with lateral forces acting at right angles to the rail axis (see col 3 lines 10-15).

Young (the current inventor) is concerned with a similar problem and discloses a support shoulder, rail pad and insulator but:

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1. The support shoulder 10 does not include projections on the sides to locate the rail pad correctly to leave a recess for the insulator.

2. The rail pad 9 does not have projections extending along the sides of the shoulder that are vertically thicker than the rest of the pad. The only portion of the pad that is of greater vertical thickness are the ribs 25 which lie under the rail edge not along the sides of the shoulder 10.

3. The insulator 24 is not a deep post insulator as the insulator 24 sits on the pad 9 (see figure 1).

This patent is primarily concerned with lateral forces which result in the rail cutting the rail pad.

Harkus (4971247) discloses a rail pad but as can be seen in figure 1 there is no insulator between the clip and the foot of the rail.

Pilesi also discloses a support shoulder, rail pad and insulator but:

1. The support shoulder 31,32 does not include projections on the sides to locate the rail pad correctly to leave a recess for the insulator. What the Examiner refers to as projections in figures 2b and 4 are on the rail face of the shoulder. They are there to reinforce the edges of the hole. These projections are above the rail pad and do not abut the rail pad. The sides at right angles to the rail face cannot contain projections because they contain the holes for fastening clip.

2. The rail pad 40 does not have projections extending along the sides of the shoulder that are vertically thicker than the rest of the pad.

3. The insulator 36 is not a deep post insulator as the insulator 36 sits on the pad 40 (see figure 2b).

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In summary, it is applicant's position that none of the citations either alone or in combination deal with the problem of pad creep as proposed by the claimed invention. One skilled in the art, faced with the problem of designing a system that avoided or reduced the effects of pad creep on rail pads would not find any assistance from reading the cited patents and thus the references fail to anticipate the invention or render it obvious.

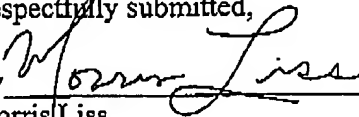
In view of the above, consideration and allowance are, therefore, respectfully solicited.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

The Director is hereby authorized to charge any fees, or credit any overpayment, associated with this communication, including any extension fees, to CBLH Deposit Account No. 22-0185, under Order No. 21854-00042-US from which the undersigned is authorized to draw.

Dated: December 6, 2005

Respectfully submitted,

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